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## **Transport planning in sub-Saharan Africa**

### **Report 2: Putting gender into mobility and transport planning in Africa**

**Gina Porter**

#### ***Introduction***

The first progress report in this transport series presented an overview of major current transport research themes and gaps in Sub-Saharan Africa from a social science perspective. This second report is specifically concerned with gender and, in particular, women's physical mobility, transport needs and patterns of transport use. It reviews the causes and effects of the current broad pattern of gender disparity in transport access and use in Africa, paying particular attention to cultural constraints on women's travel, the impact of poor transport on women's health and women's access to IMTs. It then considers the gendered impact of transport interventions and suggests reasons why efforts to improve women's access to transport have had limited impact to date.

The interactions between gender constructs, women's mobility and transport development are strongly evident in the African context. Prevailing gender constructs are intimately related to places and to the interaction between places: just as social processes help shape gendered mobility patterns and access to transport, mobility and transport are strongly implicated in the shaping of social processes. In terms of livelihood, women's mobility affects their immediate access to facilities like markets, banks and credit and their potential for occupational flexibility and diversification as a way of moving out of poverty, while mobility which gives access to education, social networks (for example attendance at funerals in Ghana) and the political process may have crucial implications for the future division of labour and the overall bargaining power and position of women in society (Evers and Walters 2000; Porter 1997, 2002a; Davis 2005)<sup>1</sup>. Freidberg's (2001) research on the reworking of gendered meanings of work and gender roles as a response to improved communications in Burkina Faso clearly illustrates this proposition.

#### ***Gendered patterns of access to mobility and transport: evidence from rural and urban studies***

Although women's and men's access to mobility and transport may vary with age, socio-economic status, local culture and other factors, there are fairly widespread gender distinctions across Africa (particularly among lower income groups) regarding use and operation of transport and in broader patterns of mobility. Currently, men are the principal operators (and owners) of commercial motorised and non-motorised transport equipment in most rural and urban areas, while women are commonly the principal pedestrian transporters. Both men and women may be important consumers of transport, but women tend to face more substantial constraints on their mobility and travel mode than men due to their relatively poorer economic position (generally lower incomes than men and less access to land, labour resources and other

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<sup>1</sup> Linkages between education and gendered mobility patterns will be examined in my next progress report (on children's transport needs).

productive assets), and the time-poverty induced by heavy work burdens and child care responsibilities (Blackden and Wodon eds. 2006).

Most of the early gender and transport research (notably Curtis 1986, Doran 1990, Urasa 1990, Bryceson and Howe 1993, Malmberg Calvo 1994a) was conducted in rural contexts and emphasised how African women's time poverty (associated with their multiple roles in production, reproduction and broader community support) is exacerbated by transport-related labour demands and by their widespread inability to access transport services (where these are available) due to lack of funds. Water and fuel wood transport is commonly a woman's duty (assisted by her children) but in remoter and less accessible areas she is often also required to carry agricultural produce and other loads over considerable distances for her husband and male family members, because of inadequate or costly transport facilities. It is a cultural norm in many African societies that men over the age of about 15 years head-load wood, water and grain (particularly where these are for the family's own use) only in exceptional circumstances.

Even where good roads and frequent transport services exist, women are often seen trudging along the roadside with heavy loads because they cannot afford transport fares. Early studies of transport activities in Ghana found men spent only 35% of the time and exerted only 25% of the load-carrying effort of women (Howe and Barwell 1987) while comparative work in Tanzania suggested that trips by women accounted for 70% of all transport time and ton-km carried (Barwell and Malmberg Calvo 1989). More recent research has elaborated on this work: examples include Mudzamba on rural Zimbabwe (1998), Potgeiter et al. (2006) on South Africa's rural Eastern Cape, and a series of small rural-based case studies (researched mainly by NGO and government staff who work in the transport sector, rather than academic researchers) conducted under the auspices of the International Forum for Rural Transport and Development (Fernando and Porter eds. 2002).

Urban-based studies of gendered patterns of transport in Africa have been relatively rare but tend to indicate similar patterns of disadvantage to those in rural areas: in Nairobi 27% of female-headed households reportedly made all their journeys on foot, compared with 15% in male-headed households (Turner and Fouracre 1995). Women may lose in the fight for space and seats on congested urban transport (Abane 1993), but being a female pedestrian can bring women into range of other potential dangers: a study of Johannesburg suggests how factors such as crowding and fear of crime act to restrict their mobility (Seedat et al. 2006). A richly detailed study of women traders' travel patterns in Accra (Grieco et al. 1996) makes important observations regarding the impact of women's multiple roles, local transport provision, urban traffic congestion and a range of cultural conventions (including cycle riding) on women's mobility in an urban setting and indicates some of the ways that women traders cope with transport stress: by fostering children, hiring domestic servants and doorstep petty trading by elderly women who act as 'domestic anchors' for their families. This study suggests that women traders can influence transport routes, because of the informal nature of the transport sector, becoming route makers when they strike contracts with transport operators (ibid 42-43 etc.) but the principal picture is one of constraint. Another West African urban study examines women's livelihood strategies and associated mobility patterns in Porto Novo, Benin (Mandel 2004). This puts particular emphasis on the way ethnicity shapes mobility (substantial difference

between Goun and Yoruba cultural conventions regarding women's mobility), but also shows how this may be mediated by class and life-course phase.

These urban and rural studies point to the significance of cultural context in helping shape women's mobility and use of transport services. Moslem societies which practice strict female seclusion offer an extreme case. Even in areas with good transport, women may be unable to benefit from transport availability because they are not allowed to leave their homes, except in special circumstances (Robson 2000). This applies particularly to urban women in cities like Kano, Nigeria since, despite the ready availability of transport services in urban areas, it is often here that there is sufficient labour availability for husbands to be able to afford to seclude their wives (i.e. they can afford to sink a well in the compound etc.). In rural areas, by contrast, only richer Moslem men may be able to afford to maintain their wives in purdah: thus women in wealthier families may have less mobility than the poor. However, it is important not to draw blanket conclusions about the impact of Islam on women's access to and use of transport. In many Islamic areas in West Africa, for example, most women are not secluded and are widely in evidence both walking and (if they have sufficient funds) travelling on public and private transport. This is the case in Borno, north-east Nigeria, in Moslem villages on the Jos Plateau, Nigeria, and in the Upper West Region of Ghana (Porter 1988, 1995, 1997; Flanary 2004). However, in Borno there are certainly informal restrictions on Moslem women below the age of menopause travelling further than their nearest local market (ie. within about 10 kms): travel on public transport to distant markets is associated with suspect behaviour and prostitution.

It is also important to bear in mind that strong restrictions on women's mobility are by no means restricted to Moslem societies. Young married Goun women in Benin (i.e. under the age of 30), for example, are expected to stay at home with their families until they have several children of at least school age, even when they have moved into urban areas (where they commonly live with in-laws): this restricts not only their opportunities to engage in economic activities, but even visits to their own families (Mandel 2004).

### ***Gender, transport and health***

Access to health services provides a particularly good example of the crucial significance of mobility to women's lives. Transport is only one of a number of factors which may influence utilisation of health services: Airey (1992), for instance, in an early study of linkages between hospital utilization and transport in Kenya, found that treatment costs were an even more significant barrier for men and women than transport costs. Nonetheless, women's relatively poor access to transport, and the restrictions which may be imposed on women's mobility (including women from high socio-economic groups), can have particularly significant implications for women's health, especially maternal health and emergency obstetric care, with associated issues such as obstetric fistula (Muleta 2006).

The important research gap in linkages between gender, mobility and health has been highlighted by growing concerns over reaching the MDG on reducing maternal mortality (by 75% by 2015) and the fact that Africa has the world's highest maternal mortality rates (Grieco 2005). A study showing access to transport as an implicating factor in 28% of maternal deaths in Masvingo, rural Zimbabwe (as opposed to 3% in

Harare, Fawcus et al. 1996), is indicative of the scale of the problem in rural areas, given the fact that women have a 1 in 13 chance of dying from pregnancy in childbirth in sub-Saharan Africa. Recent medical literature has begun to draw attention to access/transport/mobility permission issues in the context of women's health care (e.g. Moodley 2004 on hypertensive disorders in South Africa; Abrahams et al. 2001 and McCray 2004 on prenatal care in South Africa; Cham et al. 2005 on maternal mortality in rural Gambia; Murray and Pearson 2006 on maternity referral; Onah et al. 2006 on maternity services in Nigeria). Grieco's (2005) toolkit on gender, transport and maternal mortality ([www.people.cornell.edu/pages/mg294/maternalmortality.htm](http://www.people.cornell.edu/pages/mg294/maternalmortality.htm)) and a new international networked research project on mobility and health now in progress ([www.mobilityandhealth.org](http://www.mobilityandhealth.org)) will hopefully generate crucial new evidence, understanding and examples of good practice.

A factor which may have important health implications for many African women is their role as pedestrian porters. Many women walk substantial distances each day carrying heavy loads, often while pregnant and/or with a baby on their back. The impact in direct health terms is difficult to assess: the majority of evidence is anecdotal, but includes backache, head and chest pain, miscarriage, deformation of the spine, osteo-arthritis of the soft tissue of the knee, etc: see Carr 1983; Mudzamba and ILO 1998:12; Doran 1996:23, 61; Turner and Fouracre 1995). There is also potential inter-generational impact on children (miscarriage, poor growth of foetus, quality and quantity of breast milk (see Doran 1996:61 citing an ILO study regarding the high incidence of miscarriage among fuelwood porters in Ethiopia; Curtis 1986). This is an issue on which detailed research is needed.

### **Women's usage of Intermediate Means of Transport (IMTs)**

IMTs such as cycles, motorcycles and animal-drawn carts can enormously facilitate intra- and inter- village trip making in Africa (see Transport Progress Report 1), but women generally have much more limited access to IMTs than men. This is commonly attributed to a mix of economic and socio-cultural factors: women's more limited resources to purchase transport equipment; restricted access to equipment belonging to male household members when the latter view IMTs as symbols of social status and prestige (Leyland 1996); cultural constraints on women's use of particular modes associated, for example, with respect and honour (women being placed in a position of shame by traffic hooting at them) or women's perceived lack of physical strength to handle draught animals or push heavy carts (despite their evident strength in headloading) (Grieco et al. 1996: 92-3; Porter et al. 2003; Flanary 2004) and perceived gynaecological dangers in riding astride transport equipment (Porter and Blaufuss 2002)<sup>2</sup>. However, the association of IMTs with improved personal mobility and women's perceived increased potential for promiscuity or for empowerment may be an underlying factor affecting individual male attitudes in many cases.

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<sup>2</sup> Dress is sometimes cited as a factor which hampers women cycling, but men in regions such as northern Nigeria manage to cycle in traditional long gowns without difficulty.

Cycling provides clear illustration of the issue. Women cyclists are a rare phenomenon across much of Africa (Kipke 1991, Malmberg Calvo 1994b, ITTransport 1996:26, Grieco et al. 1996; Doran 1996:25). A study in one northern Ghana village found women's bicycle riding condemned by many men as evidence of laziness and disobedience, though it is becoming more common to see women on cycles (Flanary 2004). Sometimes women may be allowed to ride side-saddle as passengers, but are discouraged or barred from riding astride: Malmberg-Calvo (1994b) refers to areas of eastern Uganda where women who ride cycles are perceived to be 'acting like men.' The availability of women's cycles (sometimes recommended as a potential solution to women's perceived reluctance to cycle) does not necessarily resolve this issue: when women in an action research project in southern Ghana were offered women's cycles on credit they still selected men's cycles (Porter 2003; Porter, Acheampong and Blaufuss 2003). The reason they gave was that cycles with a cross-bar are stronger, but it transpired that women generally handed over the cycle to male family members (and argued that they still gained benefits from the availability of cycles to the family). Most village women in this study had never had time or opportunity to learn to cycle in childhood, and it was this which seemingly governed their choice rather than concerns about the gynaecological impacts of cycle riding. Because women had not had any opportunity to learn in their youth, most were extremely reluctant to learn in adulthood (despite offers to teach them). A similar point about the difficulties for women to find time to learn to ride bicycles or handle other IMTs such as donkey carts emerges from a recent study in Tanzania (Mwankusye 2002). In urban areas of Ghana women's limited use of cycles seems to be mostly centred round the potential physical dangers from traffic and the abuse women cyclists may experience from motorists who ridicule them (Grieco et al. 1996: 123).

It would be unwise to assume attitudes to women's use of IMTs are immutable. Draught animals, for example, are often the preserve of men and boy children in a sub-Saharan context, but in Zimbabwe male migration has reportedly led to women performing 'male' tasks including handling oxen (IT Transport 1996). The rapid expansion of cycle and motor-bike taxi services in Africa (associated with availability of cheap imported Chinese motor cycles) over the last two decades has also improved women's transport and mobility. On the Jos Plateau in Nigeria achaba (motorbike taxi) services are operated mostly by young men and patronised more by men than women, but younger women also now use them. Women admit to concern about the speed and dangerous driving of the young male drivers, but they still see achaba as a lifeline when medical emergencies arise, particularly in the wet season when motor vehicles have difficulty negotiating rural roads (Porter 2002b). Similarly, in East Africa, cycle and motorcycle boda-boda taxi services, mostly operated by young men, are less used by women than men (rural women's use mostly revolves around using them for personal journeys to social events or church while rarely for relieving domestic tasks) but still bring undoubted benefits for women in terms of both speed and convenience (Iga 2002, Howe 2003).

### **Transport and mobility-related interventions: what benefit for women?**

Despite the positive impact of motor-bike taxis described above, the potential for transport interventions to improve women's lives is by no means a certainty. Indeed such interventions can have unanticipated negative consequences for women.

The complexities of impact can be seen with reference to road construction. Labour-based road construction programmes (including food for work) are now more widely targeted to give poor women, in particular, an opportunity to obtain cash incomes. However, road construction *per se* may bring limited benefits for women if they are only given the lowest-paid, most menial jobs and acquire no new skills as was reportedly the case of the Tshitwe road study in South Africa (Mashiri and Mahapa 2002). The construction of new roads brings other issues to bear: increased traffic speeds and traffic volumes commonly lead to higher accident rates (which may particularly increase women's burden as carers (Kwamusi 202), while increased mobility and the establishment of truck stops along major transit routes can encourage the transmission of communicable diseases, including HIV/AIDs and other STDs (Mashiri 2004; Ferguson and Morris 2006). Meanwhile, those living in the same region but at some distance from the new road may suffer because of the rapid reorganisation of the local marketing system, which commonly follows. For women resident in off-road areas of Nigerian Borno, this decline of off-road markets in the 1980s and 1990s had both economic and social implications when the nearest roadside market was more than a few hours walk (being thus essentially out of bounds for younger married Moslem women in this region) (Porter 1995).

Of course, physical mobility *per se* is not necessarily desirable, especially if it is simply required because of poor access to work and facilities (Bryceson et al. 2003: 43). Indeed, planning for mobility, as opposed to accessibility, may enhance gender biases in that the benefits tend to accrue to those already mobile i.e. male vehicle owners (Masika 1997: 9). Non-transport interventions to improve access to resources and thus substitute for mobility - installation of improved water supplies, community woodlots, more efficient wood-burning stoves and crop-grinding mills - might all bring more significant reductions in women's transport time than efforts to improve mobility and have the potential to bring particular benefits to poorer women who would not be able to afford improved transport services (Malmberg Calvo 1994a; Doran 1996: 12). ICTs (mobile phones, VHF radio, internet etc.) offer other opportunities for elements of mobility substitution in health, education, trade etc. and for more efficient use of transport (IFRTD 2002). Overa's (2006) study of the impact of mobile phones on traders in Ghana (saving time and transport costs) is particularly encouraging. However, there remains much concern that the structural barriers of time- and income-poverty which constrain women's access to transport will similarly affect access to ICTs (Schreiner 1999; Rathgeber and Adera eds. 2000; Fuchs and Horak 2006; Nite Tanzarn, GATNET contribution, 31/05/2005).

### **Gender, transport and the policy environment**

Studies emphasising the enormous transport demands placed on women in many African societies and problems associated with their limited access to motorised and non-motorised transport have now been available to the development community for some years, yet transport remains a surprisingly neglected area among gender specialists, while transport specialists are still reluctant to take on gender issues. Perhaps reluctance in both areas can be linked to the fact that Africa's transport ministries, the donor transport sector and academic transport institutions tend to remain dominated by male civil engineers, many of whom appear more focused on delivery and outputs than on perspectives and needs of users. Moreover, the participatory and qualitative research approaches favoured by most gender researchers are often discounted by transport engineers and planners. A Ugandan researcher

reports one such response to qualitative data: “Do you expect us to work with corridor rumours to plan for the country”! (Nite Tanzarn, GATNET, 17/06/05).

Consequently, although there are token efforts at gender mainstreaming in transport projects, as a response to general donor requirements, this mostly amounts to little more than ‘ticking the gender box’. In 1997 just 4% of World Bank transport projects included a gender component or gender actions, compared with 35% for agriculture and 44% for education (World Bank 1999): the situation has improved little over the last decade, despite Bank efforts such as the preparation of a handbook for gender responsive transport projects (Maramba and Bamberger 2001). Gender tends to be included as a specific component within larger projects, rather than a gendered approach being taken to the design of the whole project or programme (Turner 2004). When budget cuts are required in such projects, the gender component is a vulnerable target. Thus, a recent review of gender integration in Uganda, Senegal and South Africa found little meaningful action on gender in the transport sector, despite strong commitments to gender issues in national gender and other policy frameworks (Transport Research Laboratory 2003 [www.id21.org/urban/u3jt1gl.html](http://www.id21.org/urban/u3jt1gl.html)) and pointed to the crucial need for gender auditing in the transport sector. Women still tend to be seen as welfare objects rather than decision makers whose views count in consultations about the location of new roads or the provision of transport services.

An external consultation by the World Bank on its new Transport Strategy recently sparked a lively debate in the GATNET (an email discussion group dedicated to gender and transport issues) around the limitations of the document, the failure of the Bank to draw on its own commissioned studies of integrating gender into the transport sector and the need for commitment to collection of gender disaggregated data on transport and gender responsive budgeting in transport. A subsequent paper from staff working with the World Bank’s Transport and Urban Department (Roberts and Kunieda 2006) gives some hope that GATNET’s views will be heeded, but local commitment to more effective gender transport planning may be difficult to achieve. The Poverty Reduction Strategy Papers (PRSPs) now being used to guide overall policy in many sub-Saharan countries tend to give insufficient attention to gender: the Ghana GPRS, for instance, makes no link between transport and gender and limited reference to either. Given that women’s mobility is key to so many areas of development, this is an issue of considerable concern.

## **Conclusion**

This paper has emphasised the interlinkages between prevailing gender constructs, women’s mobility and transport development in Africa. Male identity and its connection to ‘motor-mobility’ is a potent factor in current gendered patterns of transport use: driving is still a mark masculine power. By contrast, headloading and child carrying are embodied skills widely expected of poorer women, in particular, and imbued with social meanings such that a woman may carry 63 kg of fuelwood (with a baby on her back; this an actual case) but find no contradiction in the fact that she is considered- and considers herself- too weak to operate a push-truck. The failure of transport planning to improve women’s access to facilities and services is of considerable concern, particularly given prevailing tendencies to simply ‘tick the gender box’. There is a range of interventions which could improve women’s access, including non-transport options like ICTs. However, the ability for women to be



physically mobile and access transport *from choice* can be seen as not only a valuable livelihood asset, but arguably a human right.

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